

Curriculum Vitae (2009)

Richard J. Lataitis
NOAA Earth System Research Laboratory
Physical Sciences Division
(303) 497-6523
Richard.Lataitis@noaa.gov

EDUCATION

University of Colorado, Boulder, Colorado

- 1992 Doctor of Philosophy in Electrical Engineering
Thesis: Theory and Application of a Radio-Acoustic Sounding System (RASS)
- 1982 Master of Science in Electrical Engineering
Thesis: Statistics of Electromagnetic Wave Propagation through a Turbulent Atmosphere
- 1979 Bachelor of Science in Electrical Engineering
- 1978 Bachelor of Science in Engineering Physics

Honors and Awards:

- 1974 University of Colorado Regents Scholarship
- 1976 Elected member of Sigma Pi Sigma (National Physics Honor Society)

EMPLOYMENT

U.S. Department of Commerce
National Oceanic and Atmospheric Administration (NOAA)
Office of Oceanic and Atmospheric Research (OAR)
Earth System Research Laboratory (ESRL)
Boulder, CO 80305

Work Experience:

- *Oct. 05 – Present*: Deputy Director for the NOAA/ESRL/Physical Sciences Division
- *Oct. 99 – Sept. 05*: Acting/Associate Deputy Director and Deputy Director for the NOAA Environmental Technology Laboratory
- *1994 - 1999*: Physicist attached to System Demonstration and Integration Division
 - Served as lead for Air Force project to install a wind profiler in Ft. Huachuca, AZ to support tethered aerostat operations for U.S. Customs Service drug interdiction activities. This project is still active within PSD and has grown to include a number of wind profilers deployed along the southern border of the United States. These systems are being incorporated into the NOAA Cooperative Agency Profiler (CAP)

- network, which augments the national NOAA Profiler Network (NPN).
 - Served as co-lead on NOAA project to develop and install phased array wind profiler radar on NOAA Ship Ronald H. Brown.
 - Coauthored a paper describing the application of wavelet theory to clutter suppression in wind profiler signals.
 - Coauthored a paper describing a scheme for removing wave motion from buoy-mounted wind profiler signals (patent awarded).
- *1990 - 1993*: Physicist attached to the Wind Profiler Research and Atmospheric Studies Program Areas
 - Developed of theory describing atmospheric effects on a Radio-Acoustic Sounding System (RASS) – Ph.D. thesis
 - Coauthored review paper *Ground-based Remote Sensing in Atmospheric Studies* (Proceedings of the IEEE), which received a NOAA Outstanding Paper Award in 1997.
- *1983 - 1989*: Electrical engineer attached to the Propagation Studies Program Area
 - Completed various theoretical studies related to the propagation and scatter of acoustic and electromagnetic waves from atmospheric turbulence, and acoustic waves from oceanic turbulence and internal waves, and the ocean surface, as applied to the remote sensing of winds, currents, turbulence intensity, sea-state, etc.
- *1980 - 1982*: Graduate Coop student attached to Optical Studies Program Area
 - Developed theory describing the propagation of millimeter waves through a turbulent absorbing atmosphere (joint NOAA/Georgia Tech. project) – Masters Thesis
- *1979-1980*: Undergraduate student attached to the Optical Studies Program Area
 - Analyzed test data for automated Laser Weather Identifier (rain, snow, sleet, hail). Co-authored summary paper *Laser Weather Identifier: Past, Present, and Future*, J. Applied Meteorology. The system was eventually commercialized and is currently marketed by Optical Scientific, Inc. (<http://www.opticalscientific.com/>).

Honors and Awards:

1985, 1988-1992, 1994-1995 U.S. Department of Commerce Sustained Superior Performance Award

1997 NOAA Outstanding Paper Award: “Ground-Based Remote Profiling in Atmospheric Studies: An Overview” Proceedings of the IEEE, 1994

Fall 1999-Fall 2001: Selected to participate in “Pioneer” class of the NOAA Leadership Competencies Development Program (LCDP). Activities included participation in the Federal Executive Institute’s 4-week Leadership in a Democratic Society (LDS) program and a series of rotational assignments intended to strengthen weaknesses revealed by a 360° leadership/management assessment. Coursework included creativity in organizations, self-awareness, leadership concepts and behaviors, health and wellness, communication skills, leading in transitions, managing budgets, coaching skills, etc.

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics Engineers (Senior Member)
American Geophysical Union
American Meteorological Society
URSI Commission F
Leader to Leader Institute

RESEARCH INTERESTS

Propagation and scattering in random media (atmosphere/ocean)
Remote sensing
Meteorological radar
Signal processing
Atmospheric turbulence
Atmosphere/ocean dynamics

MISCELLANEOUS

Local co-chairman of the 7th International Symposium on Acoustic Remote Sensing (ISARS) and Associated Techniques for the Atmosphere and Oceans held on October 3-7, 1994 in Boulder, Colorado.

Member and Chair of the OAR Equal Employment Opportunity Advisory Committee and member OAR Diversity Council (1993-1996).

Guest Editor for special issue of Journal of Atmospheric and Oceanic Technology on Acoustic Remote Sensing of the Atmosphere and Oceans, June 1997

Topical editor (Instrumentation and Sensors) for 2001 Glossary of Meteorology

Served as technical reviewer for:

Radio Science
Journal of Atmospheric and Oceanic Technology
Applied Optics
Journal of the Optical Society
Journal of the Acoustic Society
Optics Letters
Journal of Meteorology and Atmospheric Physics

Served as formal external examiner for Ph.D. thesis of Guy Potvin (The application of RASS in urban boundary layer meteorology) of McGill University in Montreal, Canada.